#### PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q85504

Heiji WATANABE, et al.

Appln. No.: 10/519,084

Group Art Unit: 2822

Confirmation No.: 7332

Examiner: Tsz K. CHIU

Filed: December 23, 2004

For:

SEMICONDUCTOR DEVICE AND ITS MANUFACTURING METHOD

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

- 1. H.-J. Cho, et al.: "Novel Nitrogen Profile Engineering for Improved TaN/HfO<sub>2</sub>/Si MOSFET Performance"; IEDM, Technical Digest 2001, pages 655-658 (previously submitted with the Information Disclosure Statement filed December 23, 2004).
- 2. United States Patent No. 6,380,104, issued April 30, 2002.

Copies of the listed documents are not submitted herewith, as reference 1 has been previously submitted and reference 2 is a U.S. patent. A copy of the corresponding Chinese

INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 10/519,084

Atty. Docket No.: O85504

Office Action, dated January 12, 2007, and an English translation thereof, citing the above listed

documents is submitted herewith.

The present Information Disclosure Statement is being filed: (1) No later than three

months from the application's filing date; (2) Before the mailing date of the first Office Action

on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after

filing a request for continued examination (RCE) under §1.114, and therefore, no Statement

under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Howard L. Beinstein

Registration No. 25,665

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 28, 2007

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Substitute for Form 1449 A & B/PTO

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

1	Comp	olete if Known			
	Application Number	10/519,084			
ſ	Confirmation Number	7332			
	Filing Date	December 23, 2004			
	First Named Inventor	Heiji WATANABE			
	Art Unit	2822			
ſ	Examiner Name	Tsz K. CHIU			
	Attorney Docket Number	Q85504			

			U.S.	PATENT DOCU	MEN'	rs	
Examiner		Document Number		Publication Date			
Initials*		Number	Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Name of Patentee or Applicant of Cited Document	
		US 6,380,104	B1	04-30-2002	Yu		
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FOREIGN PATENT DOCUMENTS							
Examiner	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date	Name of Patentee or	
Initials*		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Translation <sup>6</sup>
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Examiner Initials*	Cite No.  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published					
		HJ. Cho, et al.: "Novel Nitrogen Profile Engineering for Improved TaN/HfO <sub>2</sub> /Si MOSFET Performance"; IEDM, Technical Digest 2001, pages 655-658				
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Examiner Signature			 Date Consider	ed		
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.